

Engineer Technical Letter
No. 1110-2-335

1 April 1993

Engineering and Design DEVELOPMENT OF DROUGHT CONTINGENCY PLANS

1. Purpose

This Engineer Technical Letter (ETL) provides guidance for developing and updating Drought Contingency Plans (DCP) within existing authorities for developing water control plans. See: 3. References.

2. Applicability

This ETL applies to all HQUSACE elements, major subordinate commands, districts, laboratories and field operation activities (FAO) having civil works projects.

3. References

- a. ER 1105-2-100, Guidance for Conducting Civil Works Planning Studies.
- b. ER 1110-2-1941 Drought Contingency Plans.
- c. EM 1110-2-3600, Management of Water Control Systems.
- d. ETL 1110-2-251, Guide for Preparing Water Control Manuals.

Additional sources of information are cited in the Bibliography (Enclosure 1).

4. Need for Drought Contingency Plans

Drought Contingency Plans are an important part of the operational guidance for all Corps water control projects with the potential for providing useful service during times of drought (ref 3.c). This service is generally related to water management activities that can be provided by the project and, therefore, usually

the need for DCP only exists at projects with controllable storage. DCP are prepared either for individual projects or for river basins with several projects that can interact for drought management.

5. Background

DCP were identified as a material weakness in the Army in 1988. As a result of that identification and the clear need to have adequate plans for the use of Corps water control projects to address drought situations, a major effort was initiated to develop DCP for all projects where these plans did not already exist. This effort was concluded at the end of fiscal year 1992 when all projects had approved DCP in place. Review and revision of DCP will continue on an as needed basis as a part of the normal development and revision process for Corps water control manuals.

6. Requirements for Water Control Manual

DCP are a part of the Water Control Manual. They can exist as a physical part of the manual or as an external appendix to the manual. If the DCP are not physically a part of the water control manual, a paragraph within the text of the manual must identify the DCP, indicate plan location and include the monitoring requirements (level I) that indicate the onset of drought conditions. This paragraph must provide a logical sequence that clearly indicates when drought contingency actions must be initiated (see reference 3.d).

7. Drought Contingency Plan Objectives

The DCP objective is to portray clear, well thought out and coordinated plans that describe procedures for dealing with any drought situation that might affect operational management decisions of Corps

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projects or the use of storage during drought situations. The DCP is not a cookbook for drought management; it should be a general guide that allows for dynamic management of projects, or systems of projects, to address drought needs. The most important features of DCP are:

- a. Monitoring.* The description of the monitoring requirements for the initial action (trigger for implementation of DCP),
- b. Identification.* The identification of opportunities or actions that can be taken to manage drought situations,
- c. Implementation mechanisms.* The establishment of a mechanism to use opportunities or implement actions,
- d. Coordination.* The identification of communicants, methods, and schedule of coordination with other agencies and organizations (so important when facing a crisis), and
- e. Standard Contract.* The development of a standard (ready to execute) contract for sale or use of project resources during drought situations. This should include a description of how cost will be determined and any known costs for use of Corps storage at the project.

It is essential that DCP are complete and immediately implementable plans that address all potential opportunities of resource management during a drought situation.

8. Development of Drought Contingency Plans

a. General considerations. The development of DCP should be a comprehensive evaluation of a project's ability to address any aspect of drought. It should not be limited to water supply issues but should include water quality, environmental, fire protection, industrial, recreational, power, navigation and other beneficial uses. Within the Corps discretionary limits, deviations from the existing (prior to the development of the DCP) water control plan are a natural part of DCP. In extreme events it

is appropriate to substantially alter the operation of a project or group of projects to address drought related needs. In less significant events appropriately less alteration of normal project operation is expected. It is also appropriate, with full and careful consideration, to temporarily readjust the priorities of operation to address drought needs. Any deviation not covered in the existing operating plan should be handled through a request for deviation to the appropriate division office.

b. Scheduling. Unlike flooding, the onset of drought is a slow process and there is time to plan the most effective method to deal with the individual event. This gradual development process for droughts allows time to prepare appropriate environmental documentation to address the specific action recommended. Generally, event specific environmental documentation is preferred. It is less costly and will address issues germane to the event with up-to-date information. It should be noted, however, that the DCP is a part of the water control plan and should need no special environmental treatment. If existing environmental documentation does not cover the water control plan, it should be developed to cover those plans.

c. Environmental impacts. In the process of developing DCP it has become evident, in some cases, that DCP development may require an environmental assessment prior to plan implementation. This is generally not the case, but in those situations where it is a requirement, those aspects of this process that require long preparation time should be carried out as soon as possible so that, in the event of a drought, the management of the project is not limited by the absence of environmental impact documentation.

9. Public Involvement

With the passage of the Water Resources Development Act of 1990 (WRDA90) public involvement became a requirement in the development of and modification to water control manuals (section 310.b. WRDA90). Some DCP fall under the requirements of WRDA90. DCP that were approved before the passage of WRDA90 do

not require public involvement. DCP that were approved after the passage of WRDA90 and result in a change of the water control plan must comply with WRDA90.

10. Additional Guidance for Drought Contingency Plan Preparation

a. Editorial. The editorial guidance presented in reference 3.d may be useful for preparation of DCP. In general, duplication of materials and information in the water control manual should be avoided in DCP. In those situations where DCP are separate stand-alone appendices of water control manuals, appropriate material from the water control manual must be included in the DCP.


b. Contents. The guidance outline in enclosure 2 may be used in the preparation of DCP. It is not necessary to follow the outline exactly, but it is essential that the basic components of the outline be covered in the DCP. CESWD's "Drought Contingency Plan (SWD Framework)", included as enclosure 3, is an example of one division's efforts to develop a standardized DCP format for projects in their area. It is offered only as an example not as a form to be followed.

11. DCP Revisions and Updates

All DCP should be modified to meet the requirements of this ETL in the normal process for updating water control manuals.

FOR THE DIRECTOR OF CIVIL WORKS:

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